



EUROPEAN UNION  
EUROPEAN REGIONAL  
DEVELOPMENT FUND



# RAIL INFRASTRUCTURES AND SERVICES:

## CONNECTING EUROPE FOR CITIES AND PEOPLE

### *RAILHUC and RAIL4SEE* *AN OVERVIEW OF RESULTS*

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*Bologna, October 15<sup>th</sup>, 2014*

# 37 bodies cooperating for 3 years and more...

## PUBLIC AUTHORITIES



Ministry of the Sea, Tourism, Transport and Development



PRÁVY, VÝSTAVBY  
HO ROZVOJA  
REPUBLIKY



DAPESTI  
ZLEKEDÉSI  
ZPONT



RRA LUR  
regionalna razvojna agencija  
(subjanske urbane regije)



Rail Infrastructures and Services: Connecting Europe for Cities and People

Bologna, October 15<sup>th</sup>, 2014

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# Improve rail and multimodal passengers transport



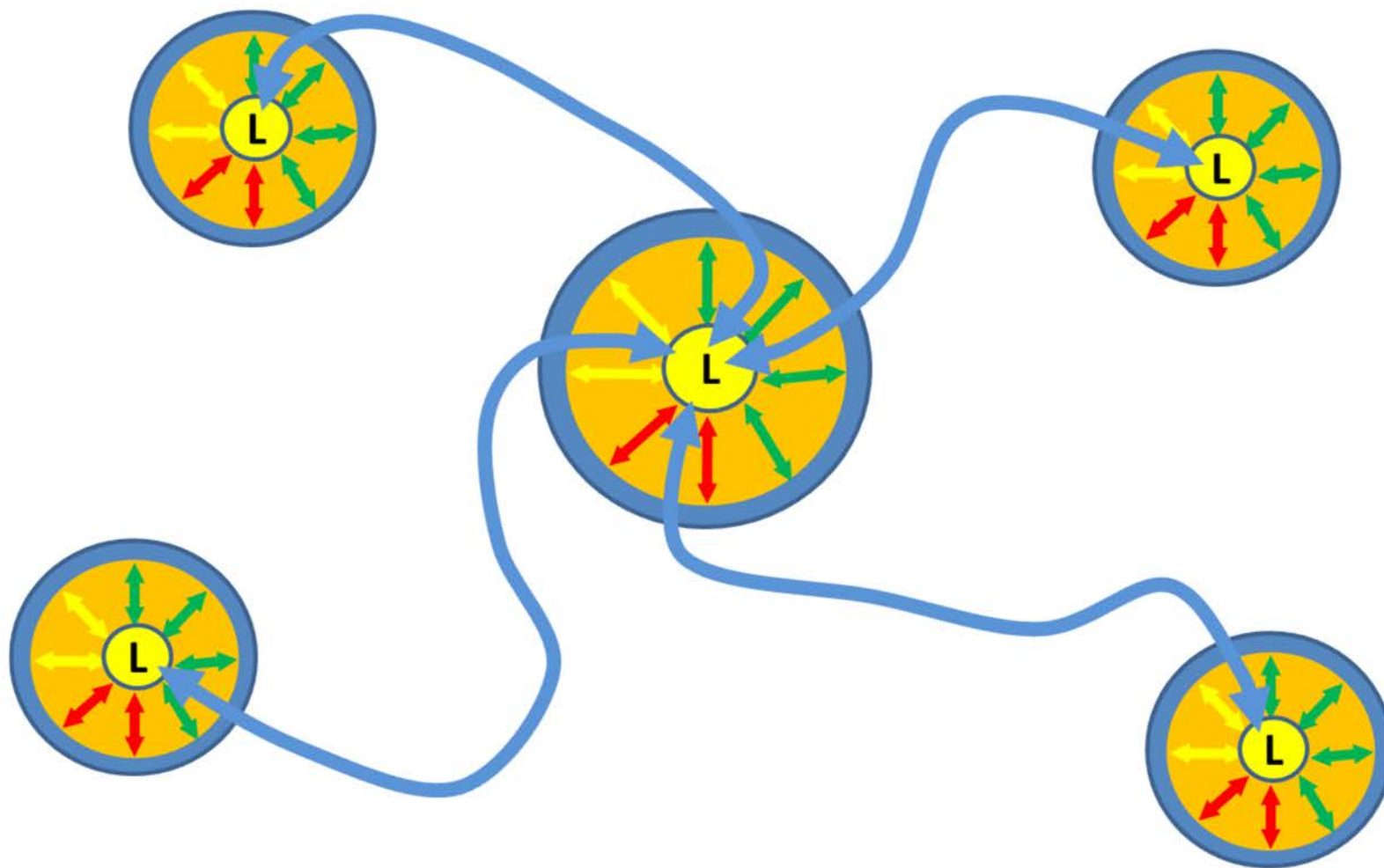
21 main rail nodes and hubs

On 5 CORE Ten-T Corridors

- Baltic-Adriatic
- Mediterranean
- Orient / East-Med
- Scandinavian-Mediterranean
- Rhine-Danube

AT 3 LEVELS OF ACCESSIBILITY

# LOCAL – REGIONAL – TRANSNATIONAL ACCESSIBILITY (on a variable geometry...)



# PILLARS



**Information**



**Harmonization of Timetables**



**New Services**



**Integrated Ticketing**



**Infrastructures**

**17 + 5 AGREEMENTS & MEMORANDA OF UNDERSTANDING**



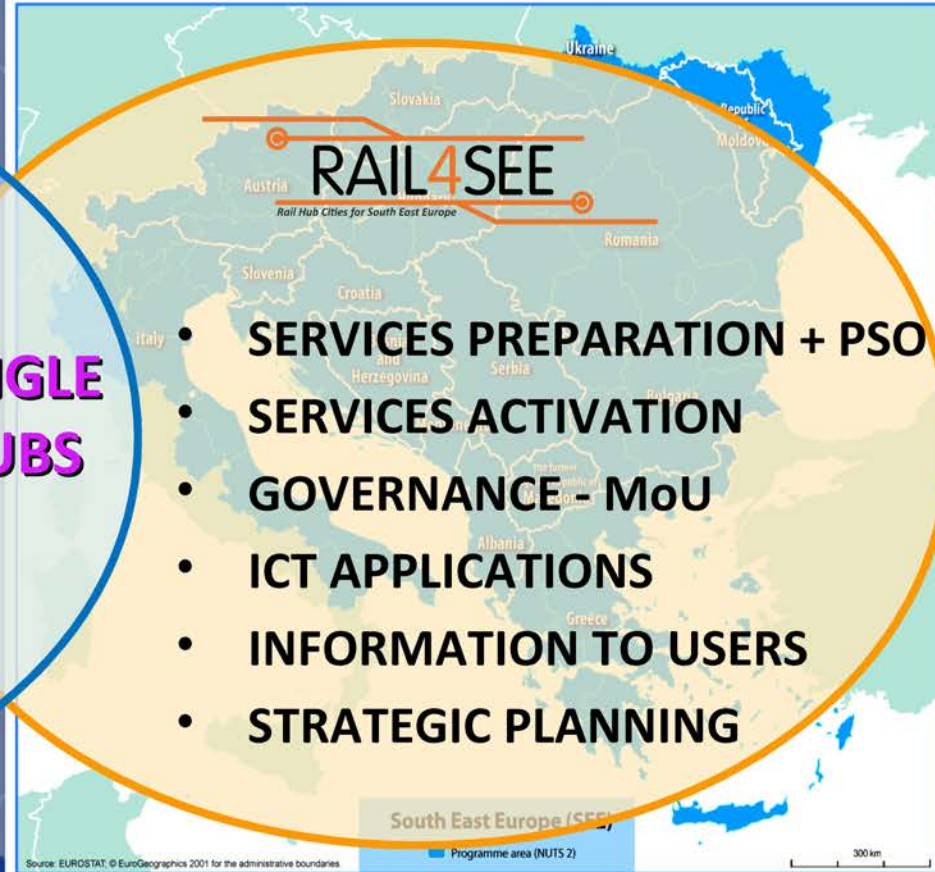
# With partially different and synergic approaches



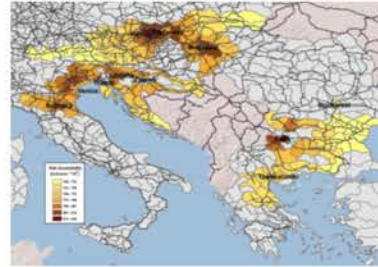
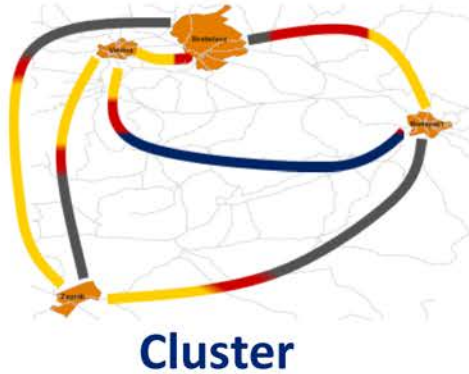
- SERVICES & INFRASTRUCTURES INVESTMENTS
- STRATEGIC PLANNING & PRIORITIZING INVESTMENTS
- GOVERNANCE - AGREEMENTS

**SINGLE HUBS**

- SERVICES PREPARATION + PSO
- SERVICES ACTIVATION
- GOVERNANCE - MoU
- ICT APPLICATIONS
- INFORMATION TO USERS
- STRATEGIC PLANNING

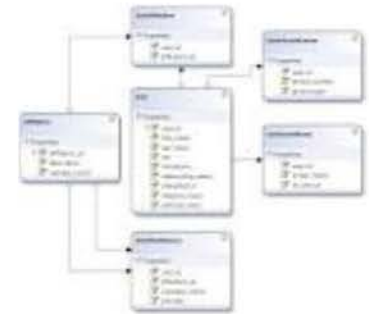
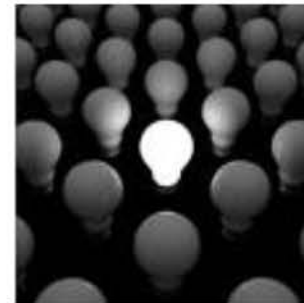


# Tools



$$P_{im} = \frac{\exp U_m}{\sum_{q=1}^n \exp U_m}$$

**Modelling**





# INFORMATION MEASUREMENT

APPLICATIONS FOR RAIL TRANSPORT USERS

PREPARATION OF ITS INVESTMENTS

- BUDAPEST
- BRATISLAVA
- ZAGREB: Feasibility study for the public transport info system
- GYŐR: Design of ITS system

Rail Infrastructures and Services: Connecting Europe for Cities and People



# INFORMATION MEASURES (NON ICT)



## DIRECT INFORMATION TO CITIZENS PREPARATION OF INFORMATION STRATEGIES & PLANS

- ZAGREB
- BUCHAREST
- LUJBLJANA: Fieldwork to check the state of information services in all rail stops/station
- SOFIA: Travel guides and brochures
- GYŐR: Study on integrated and harmonized information panels at the main stations

● TRIESTE AND VENICE

# NEW SERVICES

## TRANSNATIONAL:

ALL MAIN TENs -> analysis (RAIL4SEE clusters work)

## NATIONAL – REGIONAL – LOCAL:

**BOLOGNA – IMOLA, BOLOGNA – FERRARA, BOLOGNA CENTRAL STATION-EXHIBITION CENTRE**

**BRATISLAVA: HUB SERVICES OPERATIONAL CHANGES**

## TECHNICAL FEASIBILITIES FOR NEW SERVICES MoU FOR SERVICES INTEGRATION NEW SERVICES

● RAIL4SEE

● RAILHUC

SERVICE

**BRNO: NEW ROLLING STOCK AND PREPARATION FOR TENDERING PROCESS**

SHUTTLE BUS

# HARMONIZATION OF TIMETABLES



MEANS FOR MULTIMODAL INTEGRATION

IMPROVEMENT OF DOOR TO DOOR SERVICES

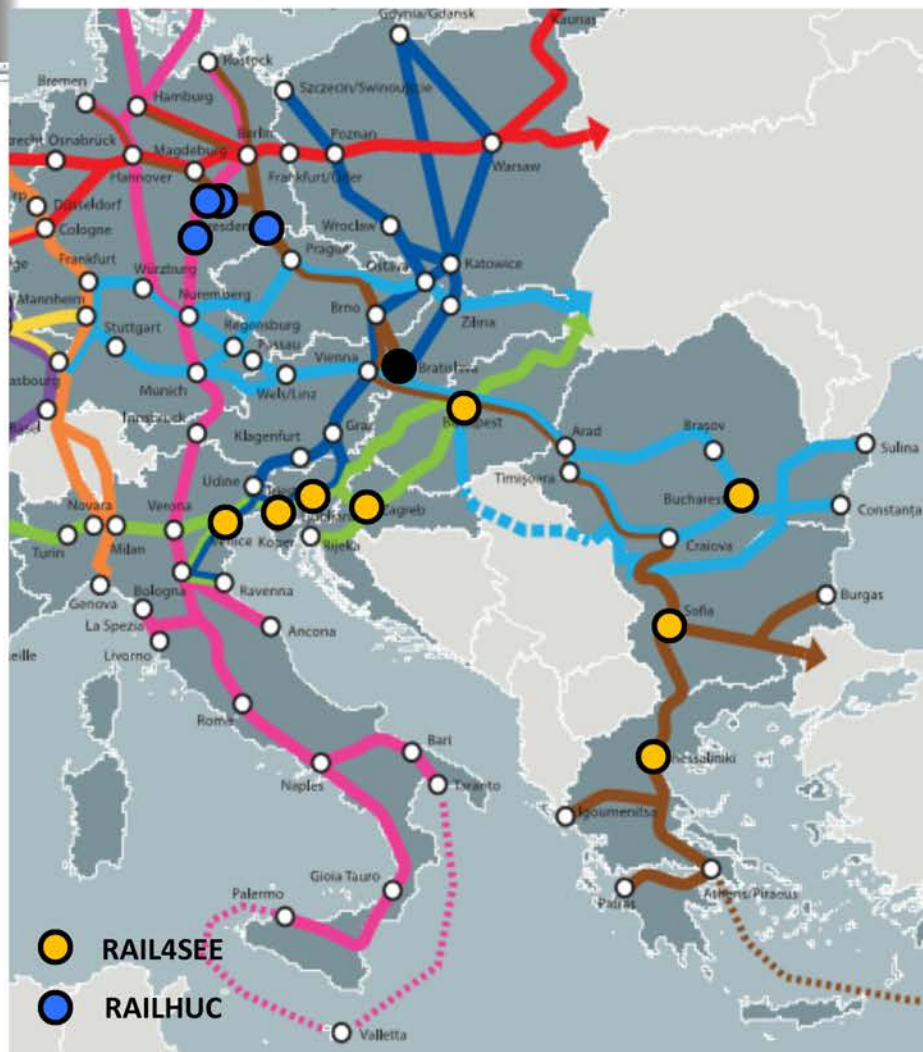
HUB FEEDING

TRANSNATIONAL CONNECTIONS OF HUBS





# INTEGRATED TICKETING



VIENNA & EMILIA-ROMAGNA DONORS

PREPARATION OF IMPLEMENTATION

# INFRASTRUCTURES - STUDIES RAILHUC

**REGGIO EMILIA:** kiss&ride - accessibility from the highway

**BRNO:** capacity and the facilities; reconstruction and **electrification of the feeding tracks**, quality and safe **park & ride** places; reconstruction of **train stops**

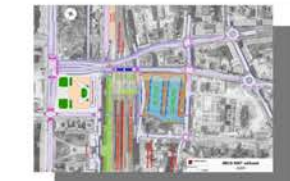
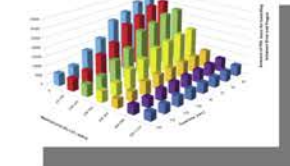
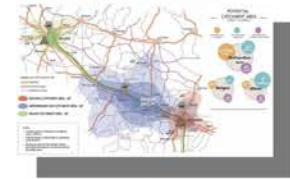
**JIHLAVA and HAVLÍČKŮV BROD:** **Public transport infrastructure** interventions designed for railway lines, intermodal transfer nodes

**CGMR:** **new cross-sections** on single track rail links, **rail link electrification** and incorporating of new rail infrastructure schemes into the **German Federal Transport Infrastructure Plan**

**GYŐR :** building of the **railway station**

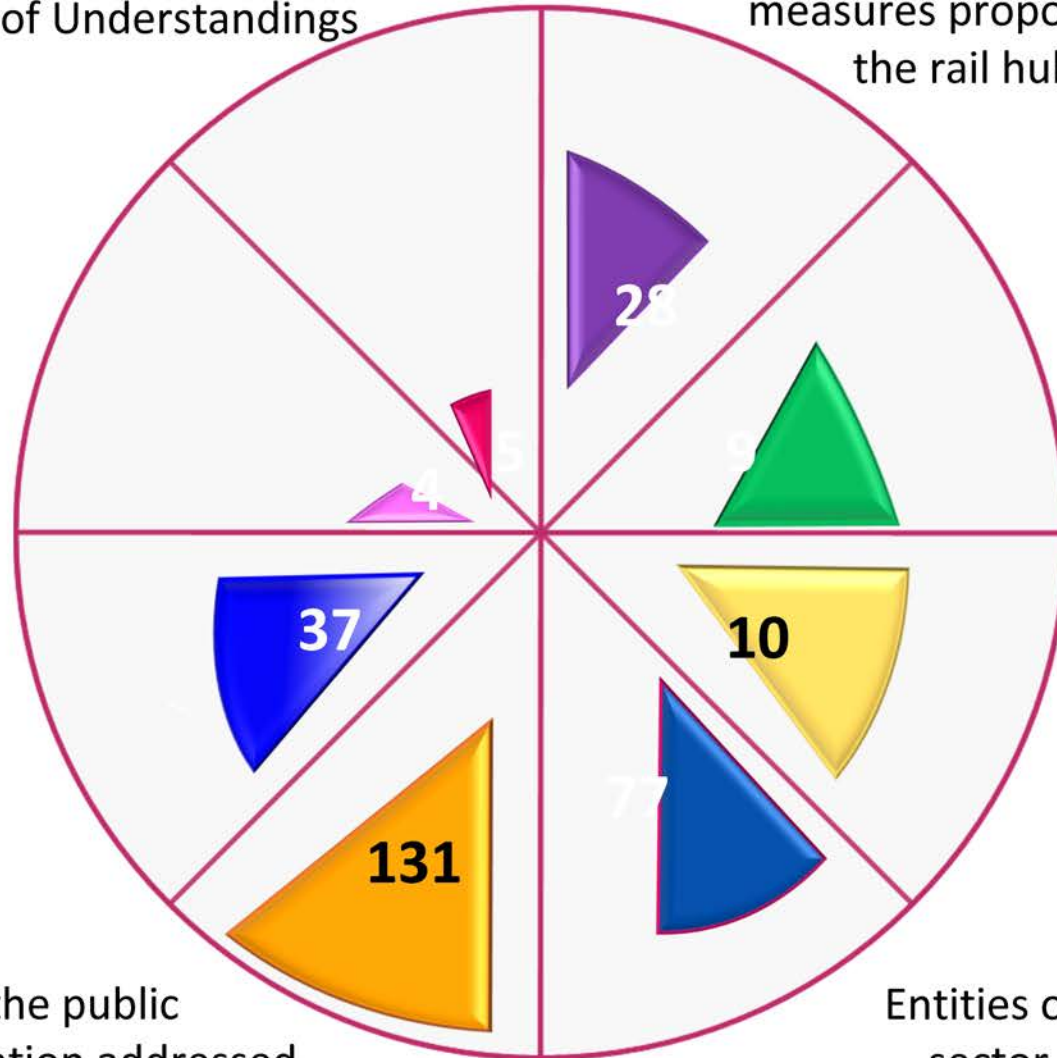
**VENICE:** **HS/HC lines** towards Trieste + **signaling system** + **technological investment** on Venezia Mestre and Venezia Santa Lucia

**LUBLJANA:** minor infrastructural - **additional track connections** + **electronic signalling devices**



# Key figures

Open discussion tables towards possible MoUs



Concrete services measures proposed

Regional events organised to discuss and fine tune the measures

Proposed measures on governance with studies

Entities of the public sector/administration addressed

Entities of the private sector addressed



# Key figures

Integrated ticketing

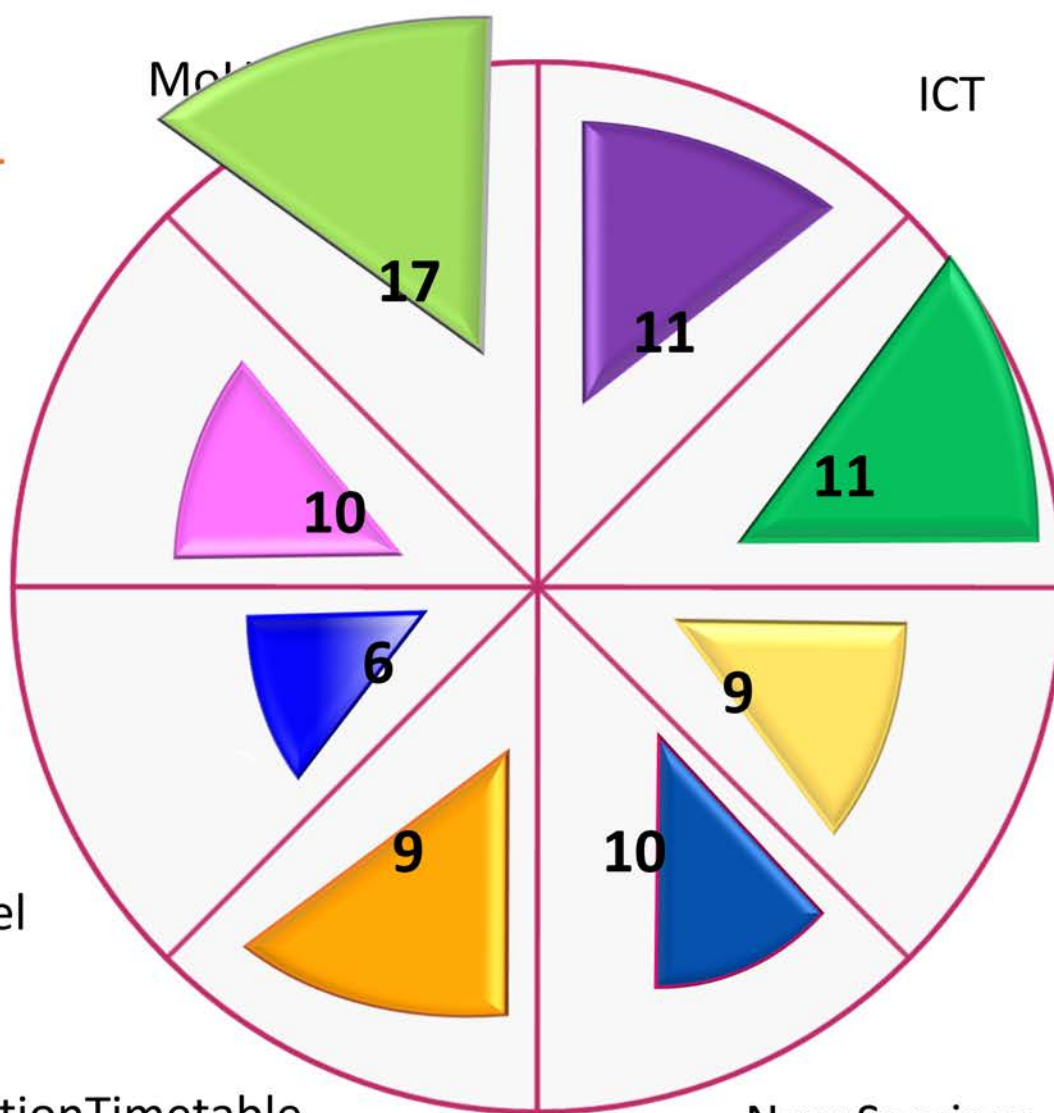
Harmonization Timetable transnational level

Harmonization Timetable local level

New Services transnational level

NON - ICT

New Services local level





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***THANK YOU FOR YOUR KIND  
ATTENTION !***

Alberto Preti

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***Bologna, October 15<sup>th</sup>, 2014***